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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,359	12/12/2003	Seiji Takeuchi	00684.003547	8693
5514 7590 06/15/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER PUNNOOSE, ROY M	
			ART UNIT 2886	PAPER NUMBER
			MAIL DATE 06/15/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/733,359

Applicant(s)

TAKEUCHI ET AL.

Examiner

Roy M. Punnoose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on 02/23/2007 is acknowledged and has been entered into the records. The applicant has cancelled claims 15-16 in response to the last office action. Claims 9-14 have been cancelled previously. Claims 1-8 are currently pending in the application.
2. After a careful review and search, the Examiner has determined that some of the claims are taught by prior art, which is the subject of this office action. Any inconvenience to the applicant is sincerely regretted.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita (US\_6,266,141) in view of what is well-known in the art.
5. Claim 1 is rejected because:
  - a. Morita teaches of an apparatus that comprises a light-projecting unit for projecting approximately circularly polarized light upon a sample (see col.6, lines 40-44), and calculating means for calculating birefringence of the sample on the basis of a Stokes parameter (see col.8, line 67- col.9, line 5) for measuring birefringence of a sample (see col.6, line 26- col.12, line 64).

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b. However, Morita does not explicitly teach of using a Stokes meter for detecting a state of polarization of light from the sample.

c. Using a Stokes meter for detecting a state of polarization of light from the sample is so well known in the art.

d. In view of what is well-known in the art, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the use of a Stokes meter for detecting a state of polarization of light from the sample into Morita's apparatus for the purpose of measuring birefringence of a sample.

6. Claim 2 is rejected for the same reasons of rejection of claim 1 above and because Morita teaches of converting light from the light source into approximately circularly polarized light (see col.6, lines 42-44).

7. Claim 3 is rejected for the same reasons of rejection of claims 1 and 2 above and because Morita teaches of converting means that includes a phase difference plate (see col.6, lines 40-44).

8. Claims 4 and 5 are rejected for the same reasons of rejection of claim 1 above and because in view of Morita's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to select a light source with a desired wavelength for measuring birefringence at the selected wavelength to obtain a desired result.

9. Claim 6 is rejected for the same reasons of rejection of claim 1 above and because dividing unit with three optical elements having the same reflection characteristic and the same transmission characteristic for splitting a beam for directing various wavelengths in different direction is well-known in the art. Therefore it would have been obvious to one of ordinary skill

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in the art at the time of the invention to incorporate such a beam splitter into Morita's apparatus for the purpose of measuring birefringence of a sample at different wavelengths.

10. Claim 8 is rejected for the same reasons of rejection of claim 1 above and because Morita teaches of a using a computer to calculate birefringence (see col.7, lines 46-54). It is well-known that computers have memory and computer's CPU operate on contents of memory and process data to calculate any set of elements.

***Allowable Subject Matter***

11. Claim 7 is objected to because it is dependent on a rejected base claim. However, claim 7 has allowable subject matter because none of the prior art documents teach of calculating birefringence using the equations of claim 7.

***Contact/Status Information***

12. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice in this office action. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-

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known statement in the **next reply** after the Office action in which the well known statement was made.

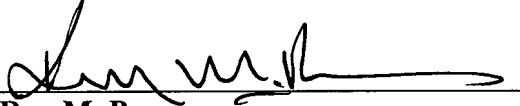
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**.

The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Tarifur Chowdhury** can be reached on **571-272-2287**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 11, 2007

  
**Roy M. Punnoose**  
Patent Examiner  
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